

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION

MONSANTO COMPANY and	)	
MONSANTO TECHNOLOGY LLC	)	
Plaintiffs,	)	
	)	
vs.	)	Case No. 4:04CV425 HEA
	)	
LOREN DAVID,	)	
	)	
Defendant.	)	

**OPINION, MEMORANDUM AND ORDER**

A bench trial in this matter took place from February 13, 2006 through February 21, 2006. From the evidence adduced at trial, the Court makes the following findings of fact and conclusions of law.

**Findings of Fact**

Plaintiff Monsanto Company is a company organized and existing under the laws of the State of Delaware with its principal place of business in St. Louis, Missouri. Plaintiff Monsanto Technology LLC is a subsidiary of Monsanto and is a holding company for its intellectual property.<sup>1</sup> Monsanto is in the business of developing, manufacturing, licensing and selling agricultural biotechnology, agricultural chemicals, and other agricultural products Monsanto developed and sells Roundup branded herbicides. The active ingredient in Roundup brand

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<sup>1</sup> Plaintiffs will be collectively referred to as “Monsanto” throughout this Memorandum and Order.

herbicides and similar non-selective herbicides is glyphosate. Roundup brand herbicides and their generic counterparts are referred to as “glyphosate-based herbicides.” A “non-selective herbicide” means that it will kill all types of plants, whether the plant is a weed, soybean plant, or any other type of plant. In addition to glyphosate-based herbicides, there are also a variety of non-glyphosate-based herbicides or “conventional” herbicides available to farmers.

Monsanto developed new plant biotechnologies, one of which is marketed by Monsanto as Roundup Ready brand crop seed. Roundup Ready technology, also called the Roundup Ready trait, has been utilized in several agricultural crops, including soybean seed. On October 4, 1994, the 5,352,605 patent (the '605 patent) was issued and assigned to Monsanto for an invention of Chimeric Genes for Transforming Plant Cells Using Viral Promoters, and since that date, Monsanto has been and continues to be, the owner of the '605 patent. This invention is in the fields of biotechnology and plant biology and genetics. One or more of the claims of the '605 patent encompass Roundup Ready soybean seeds and plants grown therefrom. All Roundup Ready soybean seeds and plants contain the chimeric gene described in claim 1 of the '605 patent. All Roundup Ready soybean seeds and plants contain the chimeric gene described in claim 2 of the '605 patent. The Roundup Ready trait causes crops grown from Roundup Ready seed to be resistant to Roundup brand and similar glyphosate-based herbicides. Soybean plants grown

from seed which do not have the Roundup Ready trait will die if Roundup brand or similar glyphosate-based herbicides are sprayed over the top of such soybean plants.

Monsanto placed the required statutory notice that its Roundup Ready biotechnology was patented on the labeling of all commercial bags containing Roundup Ready soybean seed. Monsanto would not negotiate a license with growers that would permit the grower to make unlimited use of the Roundup Ready technology.

Roundup Ready soybean seed is popular among farmers. More than ninety percent (90%) of soybean acres in the United States are planted with soybean seed containing the Roundup Ready trait.

Defendant is an individual who has attained the age of majority and is a resident and domiciliary of the State of North Dakota. He is a commercial grower of, among other things, soybeans and corn. Defendant has conducted farming operations involving soybeans and corn for many years, including the years 2002 through the present. He farms these crops in Richland and Sargent Counties, North Dakota along with Robert and Marshall Counties, South Dakota. Additionally, defendant owns acreage in Barnes and Stutsman Counties, North Dakota along with Covington and Grant Counties, South Dakota and Beltrami County, Minnesota. This remaining acreage is farmed by defendant to crops other than soybeans or corn,

rented to other farmers, or enrolled in one or more Conservation Reserve Programs, in which case, defendant receives compensation from the government in exchange for not farming this acreage.

Defendant executed a Monsanto Technology Agreement on May 3, 1999. This Agreement states, *inter alia*, that defendant agreed to use the seed containing Monsanto gene technology solely for planting a single commercial crop. He further agreed to not supply any of this seed to any other person or entity for planting, and not to save any crop produced from the seed for replanting, or supply saved seed to anyone for replanting. Defendant knew that soybean seed containing Monsanto's patented Roundup Ready biotechnology could not be saved and replanted and that the harvest from newly purchased Roundup Ready soybean seed must be sold as a commodity prior to 2003.

Defendant provides planting dates for his crops as a part of his application for crop insurance. The final planting dates, which were provided by defendant, reflected on the crop insurance records were listed as defendant having finished planting his soybean acreage on May 6, 2003, with the exception of a single 116 acre field planted on May 26, 2003.

In 2003, defendant planted both newly purchased Roundup Ready soybean seed and soybean seed that had been saved from a prior year's harvest. These

saved seeds were stored in one or more of defendant's grain bins. Defendant purchased 1,638 fifty pound units of Roundup Ready soybean seed in 2003.

In 2003, defendant purchased 1,100 gallons of glyphosate-based herbicides.

Sampling of defendant's soybean plant material, including soybean seed pods, remaining in defendant's 2003 soybean fields was conducted on April 23 and 24, 2004 by Agricultural Sampling Services. Dr. Koppatschek and his sampling team conducted tests on these samples. These tests were performed according to Standard Operating Procedures, which were developed to provide a meaningful basis to provide statistically reliable inferences about what is contained in a particular field based upon sampling that is conducted. The Standard Operating Procedures have been reviewed and audited by the United States Environmental Protection Agency. These tests confirmed the presence of the Roundup Ready trait in all of the samples collected and tested.

The samples were forwarded by Dr. Koppatschek's sampling team to Monsanto's laboratory for independent testing. The results of these tests confirmed the presence of the Roundup Ready trait in all field samples. The results conclusively demonstrate that all of defendant's 2003 soybean acreage was planted with Roundup Ready soybean seed.

Defendant testified that he purchased Roundup Ready soybean seed from Red River Grain prior to May 31, 2003, and that the 993 units of seeds were planted

prior to May 31, 2003. The Court finds this testimony unreliable. The testimony of Jennifer Wulfekuhle, office manager for Red River Grain, establishes that she wrote an invoice for the purchase of 993 units of Roundup Ready soybean seed to defendant on May 31, 2003. The invoice for this seed is dated May 31, 2003. Defendant's attempt to explain away the date is unpersuasive. Defendant's self serving explanation does not overcome the unbiased testimony and documentation from Red River Grain. This purchase occurred after defendant had finished planting all of his fields.

Defendant's purchase of 1,100 gallons of glyphosate based herbicides in 2003 is consistent with the planting of Roundup Ready soybeans. Defendant claims to have purchased conventional herbicides on May 17, 2003 in the amount of \$17,009.00 from Benes Service. However, the invoice copy dated May 17, 2003 is too "coincidental" to the invoice dated May 17, 2004 in the exact same amount to be credible, particularly in light of the lack of production of the original. The Court finds defendant's explanation of the circumstances surrounding his claimed purchase of conventional herbicides on May 17, 2003 not believable.

Throughout the course of this litigation, defendant has varied his claims regarding his soybean planting in 2003. He has testified that he planted the perimeters of his fields with Roundup Ready soybeans. He has testified that he planted conventional seed on some fields. He had testified that he planted all newly

purchased Roundup Ready seed in 2003. These inconsistencies demonstrate defendant's unreliability.

Defendant has failed to overcome the documentation and results of scientific testing which establish that his 2003 soybean crops were planted with Roundup Ready soybean seed. He has failed to overcome the unbiased documentation evidence he purchased insufficient quantities of Roundup Ready seed in 2003 to plant his entire crop with new seed.

Various testimony was presented regarding how much seed was planted and how many acres were planted in 2003. Defendant testified at different times to different amounts of seed and different amounts of acreage. There are no absolutely ascertainable numbers from which the Court can determine the exact amount of seed used, nor the exact amount of land planted with Roundup Ready soybean seed. The Court, therefore will average the minimum and maximum. The range of acreage planted was from 2, 172 to 2,272. Thus the average total acreage planted in 2003 was 2,222 acres. Testimony established that defendant planted seed at rates of between 95 pounds per acre to 120 pounds per acre. The average of these rates is 107.5 pounds per acre. If we multiply 2,222 acres by 107.5 pounds per acre and then divide the result by 50 pounds per unit we achieve 4,755 fifty pound units.<sup>2</sup>

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<sup>2</sup> The number is actually 4,755.18 fifty pound units. The Court, for practical purposes has rounded the number to 4,755.

Defendant purchased 645 fifty pound units of Roundup Ready soybean seed in 2003. With that figure in mind, 4,755 minus 645 units equals 4,110 units of infringing soybean seed.

Defendant signed the license agreement which prohibited him from saving and planting the saved seed. Further, he acknowledged that he was aware that he was so prohibited. His replanting ~~Conclusions of Law~~ therefore was clearly willful.

The use of a patented product without authority is patent infringement. 35 U.S.C. § 271(a). This section provides, “whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States. . .during the term of the patent therefor, infringes the patent.” This provision is clear and unambiguous. In cases construing the ’605 patent, courts have consistently found that planting saved Roundup Ready soybean seeds constitutes infringement of the patent. *Monsanto v. McFarling*, 363 F.3d 1336 (Fed. Cir. 2004)(affirming district court’s grant of summary judgment on the issue); *Monsanto v. Ralph*, 382 F.3d 1374 (Fed.Cir. 2004); *Monsanto v. Scruggs*, 342 F.Supp. 584, 593-597 (N.D. Miss. 2004).

Defendant’s reliance on *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred International, Inc.*, 534 U.S. 124 (2002) and the Plant Variety Protection Act of 1970 in support of his position that he is not subject to plaintiff’s claim for infringement is clearly misplaced and unavailing. In *Monsanto v. McFarling*,



decided subsequent to *J.E.M.*, the Federal Circuit rejected the possibility that the PVPA preempted an infringement claim. “[T]he right to save seed of plants registered under the PVPA does not impart the right to save seed of plants patented under the Patent Act.” *McFarling*, 302 F.3d at 1298-99. See also, *Monsanto v. McFarling*, 363 F.3d 1336 (Fed. Cir. 2004); *Monsanto v. Swann*, 308 F.Supp.2d at 946, *Monsanto v. Good*, 2004 WL 1664013 (D.N.J. 2004); *Monsanto v. Scruggs*, 249 F.Supp.2d 746.

Furthermore, defendant’s other arguments have been rejected. Regarding the patent’s lack of reference to “seeds” or “plants” has likewise been rejected. See, *Monsanto v. Scruggs*, 342 F.Supp 2d 584, 597 (N.D. Miss. 2004). The *Scruggs* Court also rejected defendant’s argument that the patents comply with the written description requirement of 35 U.S.C. § 112. *Id* at 600-601. Encompassed within this finding was the *Scruggs* Court’s rejection of defendant’s argument that a “deposit” of biological material was required by the written description requirement. *Id.*

Defendant’s attempt to avoid a finding of infringement based on the argument that the compositions of matter claimed in the ’605 patent are patentable subject matter only in their purified and isolated state is also without merit. The patent claims chimeric, *i.e.*, man-made genes, not genes that naturally occur. The “isolated

and purified” requirement therefore does not apply. *Monsanto v. Good*, 2004 WL 1664013, at \*5.

Patent infringement damages are warranted pursuant to 35 U.S.C. § 284. This section provides: “upon the finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement but in no event less than a reasonable royalty for the use of the invention by the infringer, together with interest and costs as fixed by the court.” 35 U.S.C. § 284.

Both parties have submitted expert testimony regarding what a reasonable royalty should be in this matter.<sup>3</sup> As the *Ralph* Court held

[defendant’s] suggestion that the Technology Fee is an established royalty for the use that he made of the seed can be rejected as unsound. One of the most fundamental tenets of patent law is that a patent gives its owner the right to exclude others from making, using, selling, offering to sell, or importing the patented subject matter. 35 U.S.C. § 271 (2000). If the patent owner chooses not to totally exclude others, he or she may negotiate with a potential licensee to permit the licensee to make, use, sell, or import the patented subject matter under whatever terms the parties agree upon. Monsanto has chosen, as is its prerogative, to permit farmers to plant a commercial crop of the patented seeds in a single season in exchange for payment of the Technology Fee and a promise, manifested through the Technology Agreement, not to save those seeds that are harvested at the end of the growing season for replanting production, sale, or transfer to others. The Technology Fee is a royalty, to be sure, but it is a royalty for only

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<sup>3</sup> Monsanto filed motions in limine to exclude defendant’s experts. In light of the fact that this matter was before the Court and not a jury, the Court’s gatekeeper function under Rule 702 of the Federal Rules of Civil Procedure and *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), was not required with respect to these experts. The Court, in considering all experts in this case remained cognizant of the role and function of experts as defined in Rule 702 and *Daubert*.

a narrow, contractually agreed-upon, use of the seed. It is undisputed in the record that Monsanto has not granted licenses to anyone to plant, produce, or transfer saved seed. The Technology Fee is therefore not an established royalty for planting or transferring saved seed, the uses that [defendant] made of the patented invention.

[Defendant] argues that no same farmer would ever negotiate a royalty in excess of his anticipated profits. However, although an infringer's anticipated profit from use of the patented invention is "[a]mong the factors to be considered in determining" a reasonable royalty, *see Georgia-Pacific* 318 F.Supp. At 1120, the law does not require that an infringer be permitted to make a profit. And, where, as here, a patentee is unwilling to grant an unlimited license, the hypothetical negotiation process has its limits. As we explained in *Del Mar Avionics, Inc. v. Quinton Instrument Co.*, 836 F.2d 1320 (Fed Cir. 1987), the "imposition on a patent owner who would not have licensed his invention for [a given] royalty is a form of compulsory license, against the will and interest of the person wronged, in favor of the wrongdoer." *Id.* at 1328; *see also Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1554 n. 13 (Fed.Cir. 1995) ("the hypothetical negotiation is often referred to as a 'willing licensor/willing licensee' negotiation. However, this is an inaccurate, and even absurd, characterization when, as here the patentee does not wish to grant a license."). Just as [defendant] asserts that he would never pay Monsanto such a royalty just to be able to save seed for replanting or transfer, Monsanto would apparently never permit [defendant] to save seed for replanting or transfer at any price.

*Ralph*, 382 F.3d at 1383-84.

Infringing use of Monsanto's patented Roundup Ready soybean confers substantial benefits on the infringer and places risk on Monsanto as the patent holder for the invention. As such, Monsanto is entitled to a reasonable royalty of \$55.04/bag. This figure is based upon the expert testimony presented, the actions taken subsequent to Monsanto's investigations and the Federal Circuit's conclusion

in *Ralph* that this amount is not excessive. The Court therefore finds that Monsanto is entitled to 2,222 acres of soybean seed at a rate of 107.5 pounds per acre. Therefore, a total of 4,110 pounds of infringing seed multiplied by 55.04 per bag results in a reasonable royalty of \$226,214.40.

Because the Court has found that defendant knowingly planted saved Roundup Ready soybean seed during the 2003 crop year, he is also liable for breach of the licensing agreement. Defendant voluntarily signed the Technology Agreement at issue. In that agreement, he agreed not to save seed. Monsanto is therefore entitled to judgment as a matter of law. Under the contract, defendant agreed that the technology provider, Monsanto, is entitled to recover its full amount of legal fees and other costs of enforcing the agreement.

Accordingly,

**IT IS HEREBY ORDERED** that Monsanto is awarded a reasonable royalty for defendant's knowing infringement of Monsanto's patent in the amount of \$226,214.40.

**IT IS FURTHER ORDERED** that Monsanto is entitled to recover its legal fees and other costs of enforcing the agreement.

**IT IS FURTHER ORDERED** that Monsanto's Motions in Limine, [Doc. No's. 111, and 120], are denied as moot.

**IT IS FURTHER ORDERED** that judgment will be entered upon the resolution of all remaining issues.

Dated this 20th day of April, 2006.

A handwritten signature in black ink, reading "Henry Edward Autrey", with a long horizontal flourish extending to the right.

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HENRY EDWARD AUTREY  
UNITED STATES DISTRICT JUDGE